

Climatological Data for December, 1909.
DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Cold weather prevailed generally during the month, except that temperatures were mild from the 1st to 4th and on the 31st. The mean temperature was below the normal in all portions of the district. Freezing temperatures or killing frosts occurred to the Gulf Coast, except at Burrwood, Plaquemines Parish, La. Monthly mean temperatures and departures from the normal for the various States and areas are reported as follows: Colorado area, 20.8° , -9.5° ; New Mexico area, 28.4° , -5.5° ; Texas area, 34.2° , -8.2° ; Kansas area, 25.3° , -8.6° ; Oklahoma, 31.9° , -7.1° ; Missouri area, 28.9° , -7.6° ; Tennessee area, 34.8° , -6.2° ; Arkansas, 35.3° , -6.8° ; Mississippi area, 40.3° , -7.1° ; Louisiana, 46.2° , -4.8° .

The precipitation was very unevenly distributed, and was above the normal over all the States and areas, except in Oklahoma and the Tennessee area where there was a deficiency. There was scattered precipitation every day, but there was no well-defined wet period. The precipitation during the last decade was generally light, except that it was moderately heavy in Arkansas, Louisiana, and the Tennessee and Mississippi areas on the 24th and 25th. None occurred in the New Mexico area from the 24th to 31st, inclusive. The precipitation was mainly in the form of snow and sleet in the northern and western portions of the district and rain in the southern portion. Monthly precipitation and departures from the normal for the various States and parts of States are reported as follows: Colorado area, 1.08 , $+0.05$; New Mexico area, 0.68 , $+0.12$; Texas area, 1.82 , $+0.36$; Kansas area, 1.18 , $+0.20$; Oklahoma, 1.32 , -0.19 ; Missouri area, 2.98 , $+0.41$; Tennessee area, 4.50 , -0.04 ; Arkansas, 5.26 , $+1.35$; Mississippi area, 5.67 , $+0.17$; Louisiana, 6.58 , $+2.10$.

TEMPERATURE.

Abnormally low temperature prevailed and the monthly mean was generally the lowest of record for December. The mean temperature for the district averaged 6.9° below the normal, and the deficiency was more than 9° over the Colorado area, the western and central portions of the Kansas area, the northeastern portion of the Texas area, and the east-central portion of the Mississippi area. The highest monthly mean temperature, 56.2° , occurred at Burrwood, Plaquemines Parish, La., and the lowest, 11.2° , at Leadville, Lake County, Colo. The monthly maximum reached or exceeded 70° at some stations in all portions of the district, except in the Colorado area. The first 4 days and the last day of the month were comparatively warm, generally. In Oklahoma and in the Colorado, New Mexico, Texas, and Kansas areas the monthly maximums occurred generally on the 31st, although several stations in Oklahoma and in the Kansas and Texas areas reported the maximum as occurring on the 1st or 3d; over the remainder of the district the maximum temperature occurred in most localities on the 3d or 4th. The highest temperature recorded was 85° at Gage, Okla., on the 31st. A maximum temperature of 84° was recorded at Tchula, Miss., and at Opelousas, La., on the 4th. The monthly minimum temperatures occurred generally from the 17th to 20th, except in Oklahoma and the Kansas area, where the minimum occurred at several stations on the 7th or 8th, and in Louisiana, where the lowest was recorded in many localities on the 30th. The lowest temperature recorded was -33° at Elizabethtown, N. Mex., and a minimum of -25° was recorded at Westcliffe, Colo. The lowest monthly mean minimum temperature, 0.4° , occurred at Leadville, Colo. The low mean temperature in the western portion of the district was

due more to a deficiency in the day temperatures than to abnormally low minimums. A minimum temperature of -11° was recorded at Tulia, Tex., on the 20th, the lowest minimum temperature at that place for December during the past 18 years. Taken as a whole, the weather over the district was the severest on record for December.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Light to moderate precipitation occurred over the Arkansas Basin. The amounts were unevenly distributed north of the Arkansas proper, being above the normal in some localities and below in others, but south of this stream there was a deficiency, except at a few widely scattered stations. Over the headwaters of the Arkansas in Colorado, the amounts from 33 stations ranged from 0.14 inch to 3.05 inches, and averaged 1.11 inches, being about 0.1 inch above the normal. Five stations reported more than 2 inches and 10 less than 0.5 inch. Over the stretches of the Arkansas Basin proper that lie in Kansas and Oklahoma, the precipitation increased generally from west to east and the amounts from 37 stations averaged 1.27 inches, being about 0.3 inch above the normal. Six stations reported more than 2 inches and 16 less than 1 inch. The precipitation over the Cimarron Basin was generally light, the amounts ranging from 0.06 inch to 1.39 inches. The average from 15 stations was 0.55 inch, being about 0.4 inch below the normal. Only 1 station reported more than 1 inch and 2 stations reported less than 0.25 inch. Over the headwaters of the Canadian in New Mexico the amounts from 37 stations ranged from 0.06 inch to 1.35 inches and averaged 0.68 inch; 8 stations reported more than 1 inch; departures from the normal were slight. From the New Mexico line to its junction with the Arkansas, the precipitation in the Canadian Basin, from 21 stations, averaged 1.18 inches, being about 0.2 inch below the normal. Three stations reported more than 2 inches and 9 less than 0.5 inch. The amounts reported from 10 stations in the Verdigris Basin averaged 1.19 inches, being about 0.3 inch above the normal. The precipitation in this area ranged from 0.58 inch to 2.06 inches. Over the Neosho Basin the amounts from 13 stations averaged 1.89 inches, being about 0.5 inch above the normal. The greatest precipitation in this area was 2.80 inches and the least 1.13 inches. The precipitation over that portion of the Arkansas Basin from the Oklahoma-Arkansas line to its junction with the Mississippi was generally heavy; the amounts from 15 stations averaged 4.21 inches, being about 0.6 inch above the normal. Three stations reported more than 6 inches and only 1 less than 2 inches.

Red River and tributaries.—Light precipitation occurred over the upper portion, and moderate to heavy precipitation occurred generally over the lower portion of this drainage area. From the headwaters in New Mexico to the 97th meridian the amounts from 28 stations averaged 0.57 inch, being about 0.8 inch below the normal; only 3 stations reported more than 1 inch. To the eastward of the 97th meridian the precipitation from 27 stations averaged 5.65 inches and was about 2 inches above the normal. The amounts ranged from 1.91 to 9.35 inches; more than 7 inches occurred at 7 stations and there was less than 3 inches at 2 stations. The excess amounted to more than 4 inches over that portion of this area that lies in Arkansas and from 2 to 3 inches in Louisiana.

Mississippi south of St. Louis and small tributaries.—Heavy precipitation occurred over the western and central portions of this drainage area. To the west of the Mississippi there was an excess, except at a few widely-scattered stations, while to the

east there was a slight deficiency at most stations, except in northern Mississippi. In the immediate Mississippi Valley the precipitation from 33 stations averaged 4.32 inches, being about 0.2 inch above the normal. The amounts ranged from 2.04 to 7.88 inches; 9 stations reported more than 5 inches and 4 less than 3 inches. Over the Meramec Basin the precipitation ranged generally between 2 and 4 inches, averaged 2.89 inches, and was about 0.8 inch above the normal. The precipitation was, as a rule, uniformly distributed over the White River Valley. The amounts from 22 stations ranged from 1.98 to 7.08 inches, and averaged 3.95 inches. Four stations reported more than 5 inches and 5 less than 3 inches. The precipitation was above the normal, except at 3 stations, and the average excess was about 0.5 inch. Over the Yazoo Basin the precipitation ranged from 2.96 to 8.27 inches, and the amounts from 26 stations averaged 6.28 inches; 10 stations reported more than 7 inches and only 1 less than 3 inches. More than the normal amount of precipitation occurred in nearly all portions of this area, and the average excess was about 1 inch. The precipitation was comparatively light throughout the basin of the Big Black, the average, 3.82 inches, being about 1 inch below the normal; the amounts ranged from 2.86 to 4.39 inches. Heavy precipitation occurred over nearly all portions of the Ouachita Basin. The amounts from 19 stations ranged from 4.10 to 10.09 inches and averaged 6.64 inches, being 2.4 inches above the normal; 11 stations reported more than 7 inches and 6 less than 5 inches. There was an excess of more than 4 inches over the headwaters in Arkansas, and near its junction with the Red in Louisiana. The excess amounted to less than 0.5 inch near the Arkansas-Louisiana line and there was a slight deficiency at a few stations in northern Louisiana.

Louisiana coastal plain.—Heavy precipitation occurred generally over this area. The amounts from 22 stations ranged from 4.89 to 9.53 inches and averaged 7.05 inches, being 2.5 inches above the normal. Five stations reported more than 8 inches. The excess amounted to more than 2 inches at 14 stations and exceeded 4 inches at 3 stations.

SNOWFALL.

Snow occurred in all portions of the district, except in the southern portions of Louisiana and Mississippi, and was heavier than usual for December. The amounts ranged from a trace in northeastern Louisiana to 45.0 inches at Hermit Lake, Colo. In the Colorado area snow occurred at some station on every day of the month, the fall being heavy, and there was much drifting; but on account of the severe cold it did not pack well in the gulches. In the New Mexico area the snowfall was the heaviest in several years. In the Texas area the precipitation was practically all in the form of snow and the fall was quite heavy, although there was none on the ground at the close of the month. In the Kansas area the snowfall was unevenly distributed; there was nearly 6 inches over the Cimarron Valley, except in Clark and Comanche counties where it was 1 to 2 inches. In the Valley of the Arkansas proper the amounts ranged from 2 to 10 inches, being greatest in the west-central portion. In the Verdigris Valley the amounts ranged from 3 to 5 inches; and in the Neosho Valley, 4 to 10 inches. There was much snow and sleet in Arkansas, Louisiana, and the Missouri and Tennessee areas, and in the northern portion of the Mississippi area. One station in Louisiana reported 7 inches. The average snowfall for the various States and parts of States (in inches), derived from the reports of those stations which recorded snow, was as follows: Colorado area, 15.1; New Mexico area, 7.8; Texas area, 3.2; Kansas area, 4.7; Oklahoma, 2.8;

Missouri area, 5.2; Tennessee area, 1.5; Arkansas, 3.3; Mississippi area, 3.6; Louisiana, 1.3.

RIVERS.

All streams in that portion of the Arkansas Basin that lie in Kansas and Oklahoma were bank full at the opening of the month. There was very little run-off from precipitation during the month on account of the continued freezing temperature. At Little Rock the river rose gradually until the 10th, when a stage of 10.5 feet was recorded, after which there was a steady fall until the close of the month, when the stage was 3.6 feet.

Relatively high stages were recorded in the upper portion of the Red River during the early part of the month. At Denison, Tex., the lowest stage was 0.8 foot on the 1st and the highest 9.2 feet on the 2d. At Arthur City, Tex., the highest stage, 15.8 feet, occurred on the 3d, after which there was a slow, steady fall until the 26th, when the stage was 6 feet; a slight rise commenced on the 27th and the stage was 7 feet at the close of the month. There was a rise at Fulton, Ark., from 7.7 feet on the 1st to 18 feet on the 8th, after which there was a steady fall, except on a few dates, and at the close of the month the stage was 11 feet. At Shreveport, La., the stage fell from -0.6 foot on the 1st to -1.5 feet on the 4th, after which there was a sharp rise, reaching a stage of 7 feet on the 10th. During the remainder of the month, the stage ranged between 2 and 6 feet. At Alexandria, La., the lowest stage was 1.7 feet on the 8th and the highest, 11.2 feet, on the 14th. The river was rising slowly at the close of the month and the stage was 7.6 feet.

Slight changes took place in the stages of the Ouachita at Camden, Ark., during the first few days of the month, after which there was a rise and the highest stage, 25.2 feet, was recorded on the 16th. The stage at the close of the month was 17.3 feet and falling. The river was nearly stationary at Monroe, La., during the first half of the month with a stage of 3 to 5 feet. There was a steady rise during the latter half of the month and the stage was 16.6 feet on the 31st.

Below St. Louis the Mississippi was falling at all stations at the close of the month. The highest stage during the month occurred as follows: Memphis, Tenn., 17.3, 13th and 14th; Helena, Ark., 21.7, 14th; Arkansas City, Ark., 28.4, 16th; Vicksburg, Miss., 21.3, 18th; Natchez, Miss., 21.9, 20th; Baton Rouge, La., 14.9, 22d; Donaldsonville, La., 10.0, 21st and 22d; and New Orleans, La., 6.8 on the 25th.

NOTES.

Some loss of life resulted from the snowslides in the San Juan Mountains, Colorado, and railroad traffic was maintained with difficulty and at heavy expense.

A thunderstorm, with sleet, occurred in the central and eastern portions of Kansas on the 4th, the depth of the sleet ranging from 2 to 4 inches. The sleet materially interfered with all classes of transportation and farm traffic. The Neosho River, Kansas, was frozen over after the 13th, the thickness of the ice at the close of the month being 6 inches.

Snow in Kansas and Missouri stopped the gathering of corn, but formed a good protection for the wheat fields during the severe cold.

Reports from Missouri indicate considerable suffering by the poorer classes of people and by animals and fowls as a result of the severe cold.

As an index of the severe cold in Oklahoma the North Canadian River was frozen over at Beaver during the entire month.

Low water in the Arkansas River resulted in the suspension of navigation after December 23.

MONTHLY WEATHER REVIEW.

DECEMBER, 1909

TABLE 1.—Climatological data for December, 1909. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unimpaired.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Colorado.</i>																				
Blaine.	Baca.	3,935	17	24.8	- 8.7	71	31	- 5	5	48	0.30	- 0.34	0.20	5.0	3	11	13	7	w.	M. M. Meyers.
Buena Vista.	7,955	9	17.2	46	30	- 20	19	50	1.75	1.10	18.5	4	.....	.....	.....	.....	.....	nw.	M. D. Bowen.
Calhan.	6,700	2	18.6	56	31	- 14	18	37	0.80	0.60	8.0	3	.....	.....	.....	.....	.....	sw.	H. B. Rice.
Canon City.	Fremont.	5,329	21	27.6	- 10.2	62	31	- 11	18	43	0.86	+ 0.45	0.33	12.0	3	23	5	3	n.	Thomas J. Tynan.
Colorado Springs.	El Paso.	6,098	30	21.8	- 9.2	60	31	- 15	18	39	0.34	+ 0.10	0.23	3.4	4	21	6	4	n.	Colorado College.
Cripple Creek.	Teller.	9,396	9	21.0	.....	.....	.....	.....	.....	1.17	.....	0.40	22.0	6	.....	.....	.....	f.	F. G. Willia.
Cuchara Camps.	Huerfano.	8,200	14	20.6	62	31	- 12	5	42	1.27	0.54	16.5	5	18	11	3	sw.	George A. Mayes.
Eads.	Kiowa.	4,209	2	20.6	.....	.....	.....	.....	.....	0.30	.....	0.30	3.0	1	.....	.....	.....	n.	W. H. Lauck.
Fairview.	Custer.	9,500	.....	.....	.....	.....	.....	.....	.....	.....	0.90	14.0	2	22	0	9	se.	Elizabeth L. Gray.	
Florence.	Fremont.	5,185	27.4	.....	63	31	1	81	48	1.50	2.60	0.78	33.5	8	16	7	8	.....	W. G. Fish.
Garfield.	Chaffee.	9,510	.....	.....	.....	.....	.....	.....	.....	0.33	- 0.04	0.18	3.5	3	21	8	2	n.	Lloyd N. Felton.
Glen Eyrie.	El Paso.	6,500	17	20.8	- 10.8	63	31	- 21	18	41	0.78	+ 0.40	0.40	10.5	7	17	4	10	n.	C. Nickell.
Hamps.	Elbert.	5,400	16	17.0	- 11.5	60	31	- 20	5	49	3.00	0.98	45.0	8	4	16	11	sw.	W. Hamp.
Hermit Lake.	Custer.	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jno. E. Graham.
Hoechne (near).	Las Animas.	5,700	17	23.8	51	29	.....	.....	.....	0.16	0.27	0.06	3.0	3	17	10	4	n.	S. W. DeBusk.
Holly.	Prowers.	3,380	14	23.8	64	31	- 5	5	45	0.16	0.27	0.06	3.0	3	17	10	4	n.	R. I. Arneson.	
Lake Moraine.	El Paso.	10,265	15	23.0	- 10.3	62	31	- 4	5	39	0.38	- 0.20	0.15	5.0	4	17	9	5	ne..	Joseph Strong.
Lamar.	Prowers.	3,592	19	23.0	62	31	- 4	5	39	0.39	+ 0.03	0.23	8.5	2	22	3	7	.....	J. T. Lawless.
Las Animas.	Bent.	3,899	41	23.2	- 6.5	61	31	- 8	19	47	1.64	0.85	25.8	6	13	11	8	w.	F. M. Tague.
La Veta Pass.	Costilla.	9,000	.....	.....	.....	.....	.....	.....	.....	0.24	.....	0.20	3.5	2	22	4	5	.....	Norvin B. Lively.
Leadville.	Lake.	10,248	13	11.2	- 8.9	42	30	- 19	18	45	1.74	+ 0.71	0.44	17.5	18	n.	U. S. Weather Bureau
Limon (near).	Elbert.	5,360	2	17.9	46	31	- 15	22	45	0.24	0.20	2.2	2	22	4	5	nw.	John Leaser.
Marshall Pass.	Saguache.	10,846	6	20.2	- 11.5	61	31	- 16	18	37	0.72	+ 0.19	0.40	8.6	8	16	12	3	w.	W. D. Lillard.
North Lake.	Las Animas.	8,700	.....	.....	.....	.....	.....	.....	.....	2.20	.....	1.47	23.5	6	17	3	11	w.	Guy H. Crane.
Pueblo.	Pueblo.	4,734	21	20.2	- 11.5	61	31	- 16	18	37	0.14	- 0.30	0.09	2.2	2	25	0	6	w.	U. S. Weather Bureau.
Rookytord (near).	Otero.	4,177	20	22.3	- 9.1	64	31	- 13	19	48	2.54	0.90	30.2	8	w.	P. K. Blinn.
St. Elmo.	Chaffee.	9,500	.....	.....	.....	.....	.....	.....	.....	1.59	+ 1.11	0.84	20.0	3	26	1	4	w.	Daniel Clark.
Salida.	do.	7,025	11	22.7	51	31	- 3	17	36	0.81	0.59	0.42	17.0	5	27	1	3	e.	M. D. L. Buell.	
Santa Clara.	Huerfano.	8,250	14	21.8	- 6.3	57	31	- 12	18	39	0.96	- 0.88	0.34	24.5	7	17	11	3	Lincoln Morris.
Sheridan Lake.	Kiowa.	4,065	8	18.0	54	31	- 10	5	40	0.26	.....	0.13	3.0	4	17	0	14	nw.	Howard Gamble.
Stonewall.	Las Animas.	8,000	3	.....	.....	.....	.....	.....	.....	0.59	.....	0.20	14.0	5	17	10	4	.....	J. W. Shouse.
Trinidad.	do.	5,994	14	22.7	51	31	- 3	17	36	0.34	+ 0.30	0.12	17.0	4	19	6	6	.....	Mrs. Maggie Butler.
Victor (near).	Teller.	10,100	5	22.7	51	31	- 3	17	36	0.81	0.59	0.42	17.0	5	27	1	3	e.	Fred Jones.	
Villas.	Baca.	3,935	19	22.3	51	30	- 25	19	51	0.74	+ 0.16	0.40	T.	2	15	11	5	nw.	Carrie Konkel.	
Westcliffe.	Custer.	7,884	15	15.8	- 10.3	51	30	- 16	19	51	0.26	+ 0.06	0.45	16.0	4	13	9	9	se.	Zack Jordan.
Winfeld.	Chaffee.	9,765	9	20.2	51	31	- 13	19	48	1.26	.....	0.51	21.0	9	7	16	8	w.	John G. Payne.
Wortman.	Lake.	11,250	9	.....	.....	.....	.....	.....	.....	3.05	.....	0.73	44.7	12	3	3	25	nw.	George C. Wortman.
<i>New Mexico.</i>																				
Abbott.	Mora.	5,771	.....	.....	.....	.....	.....	.....	.....	0.46	- 0.18	0.16	6.0	4	23	4	4	w.	Agt. E. P. & S. W. Ry.
Albert.	Union.	4,700	19	30.4	- 4.5	66	31	4	5	57	0.52	- 0.18	0.24	6.0	4	20	4	7	w.	Andrew Knell.
Arch (near).	Roosevelt.	75	13†	40†	1.00	1.00	4.0	2	19	0	12	n.	Wm. A. Elliott.
Aurora.	Colfax.	8,849	.....	.....	.....	.....	.....	.....	.....	1.23	.....	0.74	18.5	4	15	10	6	nw.	Miss Juanita Lucero.
Bell Ranch.	San Miguel.	4,600	5	32.1	63	2	- 7	19	48	0.15	- 0.33	0.05	1.0	5	10	14	1	sw.	C. M. O'Donel.	
Black Lake.	Colfax.	8,348	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.50	5.5	4	10	18	3	w.	Ralph T. Martinez.
Cabessa.	San Miguel.	5,406	.....	.....	.....	.....	.....	.....	.....	0.86	.....	0.36	9.0	5	6	15	10	nw.	Agt. E. P. & S. W. Ry.
Campana.	do.	4,493	.....	.....	.....	.....	.....	.....	.....	1.09	.....	0.48	13.0	4	11	16	4	w.	Alfred Lucero.
Chacon.	Mora.	9,000	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.56	15.0	4	16	13	2	e.	Wm. French.
Cimarron (near).	Colfax.	6,335	4	22.0	60	31	- 16	18	50	1.04	.....	0.30	8.0	3	17	11	2	w.	Dr. W. H. Chilton.
Clayton.	Union.	5,178	5	20.4	68	30	0	5	57	0.70	.....	0.04	1.2	3	18	9	4	s.	Agt. E. P. & S. W. Ry.
Cuervo.	Guadalupe.	4,849	33.3	67	31	0	18	33	0.06	0.84	0.30	11.5	4	20	4	7	.....	Do.	
Dawson.	Colfax.	6,396	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.15	4.5	3	25	2	4	sw.	Miss Mabel Carrington.
Dorsey (near).	do.	6,000	8	14.1	45	31	- 33	19	50	1.07	0.45	11.0	4	19	10	2	nw.	M. C. Needham.		
Elizabethtown.	Mora.	8,465	3	25.6	- 7.8	68	31	- 13	19	48	0.43	- 0.06	0.24	2.5	3	25	4	2	ne.	George L. Cook.
Fort Union.	Union.	4,444	28.6	60	31	- 6	19	38	0.68	.....	0.30	7.5	4	23	0	8	n.	Raton Water Co.	
Hayden.	Colfax.	7,160	5	31.0	75	31	- 7	19	48*	0.28	.....	0.98	22.0	4	24	3	4	ne.	John B. Reneau.
Lake Alice.	Quay.	3,851	3	31.0	75	31	- 7	19	48*	0.24	.....	0.19	5.0	3	25	2	4	w.	Wm. Frank sr.
Logan.	San Miguel.	6,789	5	31.3	70	31	- 12	20	45	0.34	.....	0.16	4.0	3	25	2	4	sw.	Miss Lou E. Porter.
Los Alamos.	Curry.	4,400	1	31.3	70	31	- 12	20	45	0.34	.....	0.45	11.0	3	24	5	2	w.	Farmers' Dev'l Co.
Maxwell (near).	Colfax.	6,000	2	20.9	50	2†	20	19	46*	0.55	.....	0.45	11.0	3	24	5	2	sw.	Agt. E. P. & S. W. Ry.
Merose.	Quay.	4,335	4	30.6	70	31	2	18	33	0.38	.....	0.38	4.0	1	26	0	5	w.	Willard Belknap.
Miami Ranch.	Colfax.	4,225	4	26.7	62	31	- 6	19	41	1.35	+ 0.98	1.15	19.0	3	28	3	0	w.	Prof. R. C. Crum.	
Montoya.	Quay.	4,200	3	31.3	70	31	- 6	19	41	0.38	.....	0.28	14.0	6	16	14	1	w.	Chas. F. Rudolph.
Nara Visa.	do.	4,225	4	30.6	70	31	2	18	33	1.00	.....	0.50	9.0	3	22	1	8	n.	Jesse T. White.
Ratoe.	Colfax.	6,660	12	26.7	62	31	- 6	19	41	1.35	+ 0.98	1.15	19.0	3	28	3	0	w.	F. M. Hughes.	
Rociado.	San Miguel.	8,200	6	24.5	62	30	- 17	18	55	1.03	.....	0.28	14.0	6	16	14	1	n.	Agt. E. P. & S. W. Ry.
Roy.	Mora.	5,884	3	31.4	73	31	- 9	19	46	0.41	.....	0.24	5.0	3	18	10	3	n.	Do.
San Jon.	Quay.	4,200	3	31.4	73	31	- 9	19	46	0.29	.....	0.25	2.5	3	13	11	7	sw.	Jesse T. White.
Salano (1).	Mora.</																			

TABLE 1.—Climatological data for December, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Texas—Cont'd.																			
Ochiltree.	Ochiltree.	1									0.00		0.00	0.0	0				S. T. Allen.
Pampa.	Gray.	3,226	20	36.6 ^a	-9.5	77 ^a	4	11	20 ^a	36 ^a	5.59	+3.14	1.80	3.5	6	15	1	15	n.
Paris.	Lamar.	592	2	30.6		76	31	-2	19	50	0.25		0.20	1.5	3	21	2	8	n.
Plemon.	Hutchinson.	1,563	4	32.6		62	31	7	20	31	0.26		0.20	2.5	3	26	0	5	n.
Quanah.	Hardeman.	745	16															R. A. Gibbs.	
Sherman.	Grayson.	530	17	37.9	-8.9	77	4	10	20	36	5.03	+1.64	1.80	4.3	8	14	2	15	W. B. Baxter.
Sulphur Springs.	Hopkins.	4,604	4															Agt. Ft. W. & D. C. Ry	
Texline.	Dallam.	3,501	11	31.8		67	10 ^a	-11	20	48	0.58		0.30	5.8	3	7	18	6	Lou Mulhall.
Tulia.	Swisher.	953	4								1.30	-0.39	0.75	3.0	4				J. B. Nicholson.
Wichita Falls.	Wichita.																		
Kansas.																			
Anthony.	Harper.	1,329	12	28.0		54	31	4	7	36	1.19	+0.34	0.96	2.0	4	13	13	5	n.
Ashland.	Clark.	1,951	2	25.2	-7.4	66	30	-4	7	50	0.18	-0.45	0.05	0.9	5	18	10	3	n.
Burlington.	Coffey.	1,010	16	25.4	-7.0	55	1	-2	8	37	2.03	+0.08	1.19	4.0	5	15	8	nw.	
Chanute.	Neosho.	940	5	26.6		60	1	-3	8	38	1.94		1.04	5.5	3	14	15	nw.	
Cimarron.	Gray.	2,700	3															Fred Mallonee.	
Coldwater.	Comanche.	2,090	11	26.4		63	31	-1	7	39	0.06	-0.62	0.06	1.0	1	17	9	5	n.
Columbus.	Cherokee.	893	19	27.2	-8.6	65	3	8	31	2.90	+0.43	0.75	4.2	7	18	5	8	nw.	
Coolidge.	Hamilton.	3,346	13	23.2	-8.1	62	3	-8	5	47	0.70	+0.41	0.50	2.0	4	11	11	n.	
Cottonwood Falls.	Chase.	1,234	5	23.2		54	1	-2	7 ^a	33	1.64		0.88	6.5	6	18	2	11	n.
Council Grove.	Morris.	1,181		22.7		53	1	-5	26	31	1.13		1.05	7.5	3	23	1	7	n.
Cunningham.	Kingman.	1,680	21	27.8 ^b	-5.9	61	30	0	7	42 ^a						18	7	6	nw.
Dodge City.	Ford.	2,513	35	22.2	-9.4	63	31	-4	7	38	0.79	+0.23	0.41	9.8	8	14	11	6	nw.
El Dorado.	Butler.	1,291	7	25.8		55	1	-2	8 ^a	29	1.56		1.01	5.5	3	14	8	9	s.
Ellinwood.	Barton.	1,788	15	23.6	-8.9	53	31	-3	8	34	1.05	+0.34	0.29	7.0	5	19	7	7	nw.
Emporia.	Lyon.	1,138	25	23.2	-10.3	52	1	-1	8	31	1.98	+0.89	0.90	9.0	4	15	6	10	nw.
Eureka.	Greenwood.	1,093	11	25.4		56	1	-4	8	31	2.06	+1.20	1.05	3.0	5	16	9	8	nw.
Fall River.	do.	925	13	27.1		57	1	-4	8	32	1.70	+0.58	0.50	4.0	6	18	7	6	n.
Fargo.	Seward.																	J. McDaniel.	
Frederia.	Wilson.	864	6	26.6		57	1	-4	8	31	1.23		0.47	3.5	5	16	5	10	nw.
Garden City.	Flinney.	2,836	15	24.6	-7.0	66	31	-3	7	44	0.70	+0.08	0.30	4.6	5	18	12	1	n.
Great Bend.	Barton.	1,550																B. W. Holmes.	
Greensburg.	Elk.	2,235	2	25.6		65	31	-3	7	41	0.28		0.15	2.2	3	17	3	11	nw.
Granola.	do.	1,116	23	25.8 ^d	-9.0	56 ^a	1	-3	8 ^a	37 ^a	0.58	-0.49	0.30	3.0	4	17	6	5	n.
Howard.	Stevens.	1,112	2			73	31	-3	5	45	0.54		0.48	3.5	4	21	3	7	n.
Hugoton.	Reno.	1,535	19	25.2	-9.8	53	30	-2	8	34	1.04	+0.13	0.34	4.5	5	17	4	10	nw.
Hutchinson.	Montgomery.	816	37	29.9	-6.0	62	3	0	8 ^a	35	1.45	-0.48	0.72	5.4	3	14	5	12	n.
Independence.	Allen.	984	3	24.3	-8.2	57	1	-2	8	32	1.73	+0.80	0.96	5.0	6	11	11	9	nw.
Iola.	Hodgeman.	2,268	8	21.4		59	31	-7	7 ^a	43	0.65		0.50	6.5	3	18	5	5	nw.
Jetmore.	Kingman.	1,504	1	27.1		55	30	0	7	35	1.01		0.62	5.5	3	9	17	5	n.
La Crosse.	Rush.	2,061	7	21.8		56	31	-6	7	37	0.66		0.23	6.0	4	18	6	7	nw.
Lakin.	Kearney.	2,993	19	23.4	-0.1	62	31	-5	7	40	0.32		-0.16	6.0	4	12	14	5	n.
Larned.	Pawnee.	2,090	5	23.6		60	31	-5	8	35	0.56	-0.04	0.20	5.0	4	16	9	6	n.
Lebo.	Coffey.	1,138	23	23.9	-11.1	53	1	-3	8	35	1.73	+0.45	0.80	6.0	4	15	5	11	nw.
Le Roy.	do.	990																C. E. Longstreth.	
Liberal.	Seward.	2,843	2	26.6		72	31	-12	5	44	0.75		0.50	6.5	4	16	2	13	nw.
MacKilloville.	Stafford.	2,032	18	24.1	-10.9	58	31	-5	7	38	0.70	+0.18	0.38	6.0	4	11	12	8	nw.
McPherson.	McPherson.	1,495	19	23.2	-9.9	53	1	-4	8	27	1.30	+0.49	0.40	10.5	6	18	6	7	nw.
Madison.	Greenwood.	1,074	8															C. A. David.	
Marion.	Marion.	1,310	15	23.6	-9.8	58	31	-5	8	34	1.21	+0.33	0.42	7.5	5	10	15	6	n.
Medicine Lodge.	Barber.	1,475	16	27.0	-7.4	55	31	0	7	40	0.74	+0.01	0.41	5.0	3	22	4	5	n.
Medora.																		S. P. Garrison.	
Mt. Hope.																		M. L. Rickenbrode.	
Neosho Rapids.	Sedgwick.	1,480																H. N. Renfrew.	
Ness City.	Lyon.	1,092	4															J. E. McLeod.	
Newton.	Harvey.	1,454	12	23.8	-9.5	52	1	-1	7	37	1.56	+0.87	0.56	2.3	6	20	2	9	nw.
Norwich.	Kingman.	1,496	13	27.3	-9.1	52	31	2	7	29	1.26	+0.47	0.83	2.0	4	12	15	4	nw.
Oswego.	Labette.	899	18	28.6	-8.8	63	3	-2	8	31	1.62	-0.50	0.93	4.5	4	14	7	10	nw.
Pratt.	Pratt.	1,950	14	24.6	-9.4	64	30	-1	7	40	0.25	-0.09	0.20	2.5	2	22	5	4	nw.
Rome.	Summer.	1,213	12	27.4	-9.7	53	2 ^a	-4	8	31	0.96	-0.05	0.56	4.0	3	19	4	8	n.
Sedan.	Chautauqua.	834	24	27.8	-8.2	60	1	-2	8 ^a	31	0.93	-0.58	0.30	6.0	5	19	5	7	n.
Toronto.	Woodson.	1,040	12	25.4	-7.3	64	1	-5	8	38	1.20	-0.27	0.50	3.5	4	6	1	24	n.
Ulysses.	Grant.	3,027	15	24.0 ^c	-8.6	67	31	0 ^a	5 ^a	51 ^a	0.55	-0.03	0.40	5.0	4	20	7	8	nw.
Walnut.	Crawford.	940	7	26.6		60	3	-5	8	34	2.80		0.75	2.0	4	16	7	8	nw.
Wichita.	Sedgwick.	1,377	22	24.8	-9.4	51	31	0	7	27	1.31	+0.52	0.71	6.0	5	10	13	8	nw.
Winfield.	Cowley.	1,124	12	25.6	-8.2	53	1 ^a	-2	9	32	1.66	+0.68	0.85	4.0	4	18	1	12	n.
Yates Center.	Woodson.	1,068	16	26.2	-5.0	58	1	-5	8	35	1.82	+0.57	0.87	5.0	5	12	11	8	nw.
Oklahoma.	Pontotoc.	1,001	3			71	3	2	30	37	0.88		0.28	5.0	3	20	5	6	nw.
Apache.	Caddo.	1	34.2			67	4 ^a	-2	19	43	1.00		0.50	6.0	3	17	3	11	n.
Arapaho.	Custer.	1,575	16	32.5	-5.6	60	10	9	7	34	0.73	-0.34	0.28	2.3	5	20	6	5	n.
Ardmore.	Carter.	872	8	34.4		73	3	4	20	34	3.82		1.42	6.0	5	20	0	11	n.
Bartlesville.	Washington.	3	3	29.2		68	3	4	20	30	1.28		0.55	3.0	3	19	5	7	nw.
Beaver.	Beaver.	2,500	13	27.0	-8.5	67	31	-3	5	44	0.40	-0.29	0.20	4.0	3	19	5	7	nw.
Blackburn.	Pawnee.	800	5	30.2		71	3	-1	9	34	1.03		0.46	3.0	4	21	6	4	sw.
Buffalo.	Harper.	1,350	4	32.2		67	4 ^a	-2	19	43	1.00		0.50</						

MONTHLY WEATHER REVIEW.

DECEMBER, 1909

TABLE 1.—Climatological data for December, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
Oklahoma—Cont'd.																					
Hennessey.	Kingfisher.	1,166	15	30.4	-8.4	59	31	7	8	32	0.77	-0.48	0.30	2.0	4	13	10	8	n.	W. W. Parks.	
Hobart.	Kiowa.	1,396	6	33.6	62	31	8	20	33	0.66	0.42	3.5	2.2	14	12	5	10	5	n.	Roy Benedict.	
Holdenville.	Hughes.	900	9	32.5	70	3	8	20	32	3.85	2.00	2.0	5	20	7	4	10	4	n.	Miss M. Rutherford.	
Hooker.	Texas.	2,999	4	28.3	75	31	-10	5	52	0.20	0.15	4.0	3	10	0	21	21	21	n.	J. N. Kelly.	
Hurley.	Cimarron.	1	26.1	69	31	-4	18	35	0.45	0.45	4.0	1	16	3	7	7	7	7	n.	C. W. Myers.	
Idabel.	McCurtaun.	474	3	29.0	54	31	5	7	30	0.28	0.13	1.0	3	19	5	7	7	7	n.	Dr. W. B. McCaskill.	
Jefferson.	Grant.	1,063	16	30.4	55	30	1	1	77	0.40	0.60	+0.23	0.20	6.0	4	14	11	6	n.	J. M. Maddy.	
Kenton.	Cimarron.	4,000	10	26.7	-8.7	58	30	1	7	35	0.36	-0.64	0.15	1.5	4	14	11	6	s.	L. A. Wikoff.	
Kingfisher.	Kingfisher.	1,046	12	32.6	-5.5	62	3	10	20	34	2.18	1.05	2.5	6	21	1	9	9	n.	J. C. Cross.	
McAlester.	Pittsburg.	698	17	35.5	66	3	8	20	35	0.85	-1.02	0.50	2.0	4	16	8	7	7	n.	Wm. Noble.	
McComb.	Pottawatomie.	1,200	15	33.2	-6.4	70	3	8	20	35	0.50	-0.60	0.30	3.0	2	12	8	8	11	nw.	Jas. E. McNair.
Mangum.	Greer.	1,584	17	9	68	31	10	77	42	0.50	-0.56	0.15	5.0	6	16	0	15	15	n.	Wade N. Johnson.	
Marlow.	Stephens.	1,292	9	32.7	-7.5	78	30	11	59	0.45	-1.42	0.15	1.5	1	22	2	7	7	n.	W. B. Anthony.	
Meeker.	Lincoln.	1,030	16	33.5	-5.2	72	31	8	7	38	0.15	-1.42	0.15	T.	1	22	2	7	n.	Dr. John H. Baugh.	
Muskogee.	Muscookee.	614	11	33.6	8	32	66	31	9	7	32	3.67	+1.86	1.20	T.	4	13	7	11	s.	Prof. E. N. Collette.
Mutual.	Woodward.	3	32.2	71	69	3	9	7	32	3.67	0.30	0.0	1	17	3	11	11	11	s.	Thos. Martin.	
Neola.	Caddo.	1,500	4	32.2	66	31	5	20	32	1.87	0.30	1.00	3.4	20	6	5	5	5	ne.	R. M. Schooling.	
Newkirk.	Kay.	1,149	13	27.8	-7.6	61	3	1	77	32	0.55	-0.59	0.20	2.0	3	13	2	11	n.	P. H. Allright & Co.	
Norman.	Cleveland.	1,171	16	33.2	-6.1	71	3	8	7	46	0.48	-1.01	0.20	1.3	3	20	6	5	5	n.	Walter H. Meier.
Okeene.	Blaine.	1,194	6	31.7	58	31	7	7	33	0.32	0.16	1.0	5	23	4	4	4	4	nw.	Dr. L. H. Murdock.	
Oklahoma.	Oklahoma.	1,247	20	31.0	-7.6	67	3	6	7	29	0.34	-1.40	0.12	1.4	7	14	9	8	8	n.	U. S. Weather Bureau.
Omulgee.	Omulgee.	752	7	32.7	70	3	8	7	42	1.34	1.09	T.	2	23	2	2	6	6	n.	J. L. Maynard.	
Pauls Valley.	Garvin.	880	10	30.9	-7.4	66	3	3	87	30	1.25	-0.52	0.45	3.5	5	16	9	6	nw.	A. M. Foss.	
Pawhuska.	Ossage.	918	11	30.9	64	3	3	71	31	1.34	+0.09	0.65	3.5	5	19	4	8	8	n.	R. C. Block.	
Perry.	Noble.	1,060	12	31.2	-7.0	64	3	0	20	38	1.91	0.56	5.8	6	18	2	11	11	n.	J. A. Douglas.	
Ravia.	Canadian.	900	17	31.6	72b	2	81	57	50 ^b	1.42 ^b	1.13 ^b	0.88 ^b	4 ^b	20 ^b	1 ^b	8 ^b	8 ^b	8 ^b	n.	R. G. Guptill.	
Sac and Fox Agency.	Shawnee.	1,041	9	31.6 ^b	62 ^b	2	81	57	50 ^b	1.42 ^b	1.13 ^b	0.88 ^b	4 ^b	20 ^b	1 ^b	8 ^b	8 ^b	8 ^b	n.	D. J. Henderson.	
Snyder.	Pottawatomie.	1,356	3	34.0 ^c	62 ^c	31	-1	19	41	0.52	0.20	3.0	5	17	7	10	10	10	n.	Neal R. Clark.	
Stillwater.	Payne.	380	17	29.3	-8.1	66	3	2	9	47	1.39	+0.11	0.76	2.1	8	20	2	9	9	n.	Dr. W. G. Woodard.
Supply.	Woodward.	2	29.8	67	31	5	7	43	0.10	0.10	T.	1	18	11	2	2	2	2	n.	John M. Spedel.	
Temple.	Comanche.	925	6	30.4	71	31	6	7	47	0.15	0.13	0.7	2	21	6	4	4	4	n.	A. H. Trimble.	
Tulsa (1).	Tulsa.	700	21	32.2 ^c	67 ^c	3	6	71	30	2.43	+0.61	1.48	4.0	6	16	4	11	11	n.	William Hall.	
Tulsa (2).	do.	702	5	32.2 ^c	67	3	3	8	31	3.10	1.00	5.0	5	22	3	6	6	6	n.	Miss Pearl E. Towers.	
Vinita.	Craig.	698	6	32.0	67	3	8	31	3.10	1.00	5.0	5	22	3	6	6	6	n.	Lyman Bros.		
Waukomis.	Wagoner.	588	13	32.1	-7.0	60	1	5	7	41	0.34	-0.63	0.10	2.0	4	18	7	6	nw.	S. L. Hatfield.	
Weatherford.	Garfield.	1,253	13	33.1	69	3	2	9	39	3.98	-0.19	2.20	0.5	7	15	4	12	12	n.	R. C. Shadet.	
Webbers Falls.	Custer.	1,639	8	33.2	60	31	8	7	41	0.11	0.04	0.7	3	18	8	5	5	5	n.	M. D. Reed.	
Whiteagle.	Muskogee.	479	11	31.9	-9.7	68	3	9	35	2.29	+0.07	0.85	0.2	6	17	4	10	10	w.	B. D. Bouleneau.	
Woodward.	Woodward.	945	4	30.1	63	3	3	77	31	0.64	0.28	6.0	6	22	2	7	7	7	nw.	J. M. Dankwardt.	
Missouri.	Maries.	1	30.4	71	31	6	7	47	0.15	0.13	0.7	2	21	6	4	4	4	n.	R. A. Boyle.		
Belle.	Birchtree.	17	24.6	-10.2	60	31	-17	30	55	3.35	+1.06	1.75	12.0	6	4	15	12	12	nw.	A. J. Wofford.	
Birchtree.	Shannon.	1,200	15	28.4 ^c	-8.0	70 ^c	3	5 ^c	77	47 ^c	2.28 ^c	-0.33	0.76 ^c	2.0 ^c	5 ^c	16 ^c	3 ^c	8 ^c	8 ^c	n.	V. H. Kirkendall.
Cape Girardeau.	Cape Girardeau.	346	4	34.1	-5.7	76	3	9	97	38	3.98	-0.19	0.48	5.0	10	16	9	6	n.	D. L. Albert.	
Carutherville.	Pemiscot.	18	34.1	-5.7	76	3	9	97	38	3.98	-0.19	2.20	0.5	7	15	4	12	12	n.	H. E. Averill.	
Dean.	McDonald.	10	30.1	-8.7	69	3	2	9	39	3.08	+1.94	1.23	3.0	7	20	1	10	10	n.	H. E. Dean.	
Donduran.	Ripley.	440	5	30.9	72	4	7	20	32	4.07	1.35	4.0	8	13	8	10	10	10	n.	W. W. Martin.	
Farmington.	St. Francois.	889	2	26.8	63	4	-6	30	38	2.19	0.40	11.2	9	9	0	0	12	12	n.	Miss Helen Montgomery.	
Gano.	Dent.	5	27.8	65	4	-1	3	30	40	2.58	0.69	8.5	11	0	11	8	11	11	n.	A. C. Leech.	
Goodland.	Iron.	900	4	26.7	64	4	-1	3	30	2.44	0.97	8.0	7	20	0	11	11	11	n.	F. M. Adams.	
Greenville.	Wayne.	14	31.8	-4.4	70	4	-1	6	30	34	1.41	+0.66	1.22	4.0	8	9	13	13	n.	A. G. Templeton.	
Ironton.	Iron.	925	31	27.3	-6.7	66	4	-1	3	30	2.88	-0.17	1.90	7.0	7	9	2	20	20	n.	W. H. Delano.
Jackson.	Cape Girardeau.	453	18	30.8	-5.9	65	41	2	30	30	3.29	-0.14	1.08	6.0	8	9	7	15	15	n.	L. M. Bean.
Joplin.	Oregon.	911	9	31.4	74	4	-6	9	40	3.37	+0.34	1.00	1.5	8	12	9	10	10	n.	Miss Elizabeth Russum.	
Koshkonong.	Lamar.	964	28	30.0	-9.9	68	4	-1	3	44	2.70	+0.65	1.30	4.5	5	10	8	8	8	n.	J. W. Hitt.
Lamar.	Barton.	420	16	28.5	-7.7	59	2	0	30	33	3.75	+0.53	1.10	7.0	7	9	14	8	8	n.	E. H. Adams.
Marble Hill.	Bollinger.	1,493	29	24.4 ^d	68 ^d	1	-5 ^d	8	47 ^d	1.20 ^d	0.90 ^d	3.04 ^d	2 ^d	8d	8d	15d	15d	15d	n.	A. F. Hendricks.	
Marshfield.	Webster.	1,493	33	28.2	-9.2	68	5	-4	8	50	2.07	+0.30	1.40	5.0	5	7	8	8	8	nw.	O. P. Keefer.
Mt. Vernon.	Lawrence.	1,480	33	28.2	-9.2	68	5	-4	8	50	2.07	+0.30	1.40	5.0	5	7	8	8	8	nw.	Dr. O. H. Brown.
Newton.	Franklin.	1,023	25	29.3	-7.0	67	3	0	9	37	4.14	+1.44	0.99	3.5	7	17	4	10	10	n.	H. D. Dean.
Olden.	Howell.	793	17	26.1	-8.9	62	5	-1	30	31	2.65	+0.52	0.82	11.0	12	6	11	14	14	n.	E. E. Steiner.
Olden.	Perry.	1,246	19	20.6	-7.9	70	4	2	9	40	3.75	+0.98	0.80	2.2	6	13	7	11	11	n.	J. D. Evans.
Perryville.	Butler.	343	1	26.4	60	4	-10	29	38	2.39	1.10	5.5	8	2	3	26	26	26	n.	S. L. Cayton.
Poplar Bluff.	Scott.	328	14	32.9	-5.4	70	4	5													

TABLE 1.—Climatological data for December, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days .01 inch or more.	Number of clear days .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.		
Arkansas—Cont'd.																				
Calico Rock.	Izard.	361	5								2.88		0.88	3.0	7	15	4	12	W. H. Stoner.	
Camden.	Ouachita.	158	24	40.1	-5.7	76	4	6	20	37	8.60	+ 4.06	3.34	5.2	10	15	4	12	R. H. Quarterman.	
Centerpoint.	Howard.	9	38.8			76	4	10	20	40	7.67		3.55	4.0	6	17	1	13	J. M. Huddleston.	
Clarendon.	Monroe.	171	5								6.63		2.25	1.5	12				Mrs. B. E. Bishop.	
Couway.	Faulkner.	309	26	35.7	-0.7	77	4	10	20	38	6.58	+ 2.68	2.13	3.7	11	13	10	8	G. H. Burr.	
Corning.	Clay.	293	17	34.0	-3.8	77	4	10	30	36	4.08	+ 0.55	1.64	0.6	7	9	10	12	Jacob Brobst.	
Dardanelle.	Yell.	330	23	33.8		75	4	11	19	37	4.44	+ 1.31	1.06	2.0	8	18	0	13	A. Bernard.	
Dodd City.	Marion.	1,175	23	31.7 ^b	-7.8	70 ^a	6	6	9	42 ^a	3.74	+ 0.74	0.80	T.	6				Neal Dodd.	
Dutton.	Madison.	8	29.9			66	4	4	20	38	3.32		2.01	2.0	5	13	9	9	T. S. Williamson.	
Earl.	Crittenden.	3	3																W. J. Moss.	
Eldorado.	Union.	265	5	38.4		77	4	11	20	45	8.76		3.47	5.0	11	15	1	15	Fred A. Babb.	
England.	Lonoke.	3	33.2 ^b			76 ^a	2	7	20	32 ^a	5.16		3.05	2.5	8	11	n.w.	J. C. Chenuit.		
Eureka Springs.	Carroll.	8	31.8			73	4	8	21	52	2.40		1.70	3.0	3	4	21	6	n.w.	
Fayetteville.	Washington.	1,451	20	33.1	-6.3	77	1	5	9	50	3.91	+ 1.10	1.80	1.5	7	15	8	8	sw.	
Fort Smith.	Sebastian.	481	27	34.0	-7.7	72	4	13	9	35	2.18		0.70	1.26	1.4	8	13	6	12	e.
Fulton.	Hempstead.	284	5								6.60		1.80	9.0	10	2.5	8	10	B. C. Logan.	
Hardy.	Sharp.	643	11	32.3	-6.3	74	4	7	9	39	3.78	+ 0.49	1.20						C. A. Caywood.	
Helena (1).	Phillip.	182	24	37.2	-7.9	78	4	12	21	40	7.36	+ 2.32	3.22	4.0	13	15	1	15	Robert Kyle.	
Helena (2).	do.	182	8										2.94	2.8	9	22	0	9	B. F. Modisett.	
Hot Springs.	Garland.	600	3	35.6		80	4	5	20	41	7.19		1.53	3.0	11			Hot Springs Water Co.		
Huttig.	Union.	85	2	40.9 ^b		77 ^a	4	14 ^a	21	38 ^a	7.08		1.58	1.0	9	8	14	C. A. Berry.		
Jonesboro.	Craighead.	345	14	33.4	-7.6	74	4	10	21	33	5.82	+ 1.26	2.80	1.0	9	8	14	Benedictine Sisters.		
Junction.	Union.	16	38.0	-7.6	70	4	12	21	34	4.28	+ 0.25	1.92	2.5	5	16	1	14	J. A. Lowderback.		
Lacrosse.	Izard.	15																R. E. Kennard.		
Lake Farm.	Jefferson.	195	2	40.6 ^b		76 ^a	4	8	20	36 ^a	9.35		3.17	3.5	11			R. H. Gillespie.		
Lewisville.	Lafayette.	262	6										4.0	4.0	15	1	15	F. W. Youmans.		
Little Rock.	Pulaski.	357	30	37.1	-6.4	74	4	9	20	42	5.31	+ 1.07	2.08	2.5	11	15	4	12	U. S. Weather Bureau.	
Lutherville.	Johnson.	775	12	33.4	-7.5	73	4	9	20	44	4.28	+ 0.66	1.60	5.0	9	9	9	Herman Hentschel.		
McNeil.	Columbia.	321	2															L. A. Smith.		
Malvern.	Hot Spring.	277	22	39.1 ^b	-5.0	77 ^a	4	10 ^a	20	33 ^a	7.52	+ 3.80	2.43	2.5	10	12	4	15	Miss L. C. Smith.	
Mammoth Spring.	Fulton.	5	31.5			74	4	8	21	37	3.61		1.47	2.5	6	8	7	F. Wallack.		
Marked Tree.	Poinsett.	5									2.06		0.80	2.5	6			L. Smith.		
Mena.	Polk.	1,100	23	35.7	-7.0	70	4	8	20	43	4.77	+ 0.88	1.50	6.6	6	8	7	D. H. Hopkins.		
Mossville.	Newton.	18	30.1	-6.6	64	4 ^a	6	8	21	35	3.61	+ 0.09	1.57	T.	3	14	3	14	Theo. Ober.	
Mount Nebo.	Yell.	1,750	19	31.4 ^b		70	4	4	20	45	3.25	-1.20	1.20	10.0	8	16	7	8	T. G. Church.	
Newport (1).	Jackson.	231	25															Mrs. A. B. Hillhouse.		
Newport (2).	do.	231	34.2	-7.3	79	4	12	21	44	4.69	+ 1.12	1.20	1.5	10	17	2	12	A. V. Hughes.		
Osark.	Franklin.	377	18	34.8	-7.7	73	4	13	21	31	2.83	-0.60	1.10	3.1	6	18	10	3	R. M. Adams.	
Pine Bluff.	Jefferson.	215	21	38.4	-6.9	77	4	10	20	39	7.00	+ 2.29	2.75	4.1	11	19	1	11	J. H. Hudson.	
Pocahontas.	Randolph.	17	35.6	-2.7	82	4	9	20	40	4.07	+ 0.54	1.84	1.0	8	11	11	9	Benedictine Sisters.		
Pond.	Benton.	1,250	12	30.6	-6.9	69	4	3	8 ^a	39	3.61		1.17	2.0	6	17	8	A. F. Stevens.		
Portland.	Ashley.	122		39.0		79	4	14	21	44	5.88		1.35	4.2	11	12	3	16	T. A. Corson.	
Prescott.	Nevada.	327	21	37.6	-6.0	76	4	4	20	45	7.90	+ 4.22	1.90	10.0	10	16	6	9	A. M. Ellsworth.	
Princeton.	Dallas.	287	8															Capt. D. R. Feaster.		
Rogers.	Benton.	1,385	18	31.6	-6.4	69	4	4	8 ^a	47	1.93	-0.19	1.75	2.0	5	10	11	10	Carl A. Stark.	
Russellville.	Pope.	348	24															J. F. Hodgins.		
Splererville.	Logan.	1,050	12	35.4	-6.1	75	4	11	20	34	2.45	-0.95	1.06	T.	5	16	6	9	New Subiaco Abbey.	
Springbank.	Miller.	182	2										2.00	3.0	9			G. Field.		
Stuttgart.	Arkansas.	495	22	37.4	-6.8	75	4	6	20	35	6.24	+ 1.68	1.78	2.6	11	15	6	10	H. A. Buerkle.	
Texarkana.	Miller.	323	25	38.4	-8.9	78	4	13	20	37	7.50	+ 4.87	1.74	4.5	9	14	3	14	W. B. Weeks.	
Warren.	Bradley.	304	14															W. J. Savage.		
Whitecliffs.	Little River.	206	5															J. E. Payton.		
Wiggs.	Garland.	16	36.0	-5.9	75	4	4	20	40	7.10	+ 3.00	3.12	3.5	9	14	7	10	S. D. Jester.		
Wynne.	Cross.	1	33.7			75	4	4	20	38	5.35		1.55	3.1	12	14	1	16	R. R. Poole.	
Mississippi.	Sharkey.	1	41.6			78	4	12	21	32	5.74		1.30	2.0	10	14	2	15	E. W. Cook.	
Austin.	Tunica.	200	13	37.2	-6.6	77	4	10	20	34	7.45	+ 1.80	1.91	3.0	9	18	3	10	H. J. Irvine.	
Batesville.	Panola.	230	22	35.4 ^b	-9.0		4	10	21	33 ^a	7.54	+ 2.85	2.20	3.0	8	18	2	13	J. M. Cox.	
Byhalia.	Marshall.	390											6.33	1.45	2.5	9	7	15	Tallahatchie Dng. Com.	
Canton.	Madison.	228	19	42.4	-6.0	82	4	16	30	43	3.94	-0.93	1.46	0.0	12	13	11	8	Dr. G. W. Smith-Vanis.	
Clarksville.	Coahoma.	177	2										4.88	1.24	8.0	10	17	J. F. Durham.		
Coffeeville.	Yalobusha.												7.77	2.22	3.5	12	15	Tallahatchie Dng. Com.		
Corinth.	Alcorn.	430	21	34.9	-7.8	73	4	12	21 ^a	32	5.01	-0.47	2.05	3.0	9	16	2	13	Milton A. Chandler.	
Crenshaw.	Panola.	187											7.77	2.22	3.5	12	15	Tallahatchie Dng. Com. Do.		
Denmark.	Lafayette.	10	39.8 ^b		78 ^b	6	11 ^b	22	44 ^b	5.19		6.26	0.6	11	14	12	15	W. H. Eskridge.		
Duck Hill.	Montgomery.	222	22	43.4	-6.1	81	4	15	30	40	4.07	-0.91	1.18	0.0	10	14	7	15	C. R. Knox.	
Edwards.	Tallahatchie.	282	8	43.3	-6.9	79	4	12	21	42	3.61	-1.36	1.07	0.0	6	16	7	8	Tallahatchie Dng. Com.	
Fayette.	Jefferson.	126	23	39.2	-7.5	80	4	15	21	44	6.49	+ 1.96	1.30	6.0	11	16	0	15	T. L. Darden.	
Greenville.	Washington.	495	22	34.3	-8.9	73	4	13	30	28	6.95	+ 1.82	2.45	3.5	11	16	5	14	F. L. Harbison.	
Greenwood.	Le Flore.	140	9	38.2	-7.0	78	4	15	21	43	6.18	+ 0.39	1.40	4.0	8	15	J. H. Stephen.			
Grenada.	Grenada.	391	21	36.7	-6.2	75	4	12	20	30	7.30		3.97	1.03	3.5	7	17	Tallahatchie Dng. Com.		
Hernando.	De Soto.	435											3.45	2.40	8	15	2	14	Miss Josephine G. Jones.	
Hickory Flat.	Benton.	600	23	34.3	-8.9	73	4	13	30	28	6.95	+ 1.82	2.45	3.5	11	16	5	13	Tallahatchie Dng. Com.	
Holly Springs.	Marshall.	430	19	33.4	-9.0	75	4	14	30	37	3.61	-0.71	0.92	1.5	11	17	4	10	L. B. Mosby.	
Kosciusko.	Attala.	206																		

TABLE 1.—Climatological data for December, 1909. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Louisiana.																				
Abbeville.	Vermilion.	18	22	47.3	- 6.5	78	3	25	30	40	6.72	+ 2.13	2.57	T.	10	14	1	16	n.	Hon. C. J. Edwards.
Alexandria.	Rapides.	77	21	43.6	- 5.9	80	3†	21	30	46	5.59	+ 0.59	2.15	0.0	7	11	5	15	e.	Miss Nellie Graham.
Amité.	Tangipahoa.	130	21	48.2	- 2.9	77	4	19	30	47	9.09	+ 4.21	1.85	0.0	10	2	26	3	n.	Miss Lula M. Wents.
Baton Rouge.	E. Baton Rouge.	35	20	49.2	- 2.7	79	4	24	30	28	7.73	+ 2.93	2.28	0.0	11	18	2	13	nw.	Elmo M. Bott.
Burnside.	Ascension.	20	9	49.8	- 3.4	79	4	24	30	42*	8.88	+ 3.07	2.80	0.0	11	11	1	11	n.	C. S. McFarland.
Burrwood.	Plaquemines.	1	19	56.2	- 2.5	78	4	34	30	27	9.97	+ 4.76	2.67	0.0	15	1	5	16	n.	Graham Myers.
Calhoun.	Quachita.	180	17	42.0	- 4.9	77	3†	13	21	41	4.31	- 0.40	1.82	3.0	7	14	5	12	ne.	N. L. Exp. Station.
Cameron.	Cameron.	6	14	53.0	- 1.9	76	2	29	12	35†									ne.	State Biologic Station.
Cheneyville.	Rapides.	67	22	47.0	- 3.1	81	3†	22	21	41	5.03	+ 0.29	2.00	0.0	7	19	0	12	n.	Walter I. Tanner.
Clinton.	East Feliciana.	113	20	47.5	- 3.9	78	4	21	30	37	5.03	+ 0.24	1.63	0.0	8	9	9	14	n.	John A. White, Jr.
Collinston.	Morehouse.	65	7	41.8	—	86d	3	13d	20	43d	4.10	+ 1.53	1.53	T.	5	20	2	9	...	W. A. Page.
Covington.	St. Tammany.	39	17	47.5	- 3.2	79	4	21	30†	42	9.53	+ 4.85	2.66	0.0	12	13	5	13	n.	C. Champagne.
Dodson.	Winn.	1	17	43.7	—	78	3†	17	21	38	6.10	+ 1.87	1.5	7	15	6	10	n.	J. P. Lucas.	
Donaldsonville.	Ascension.	33	19	49.3	- 5.2	82a	1	26	30	38*	8.20	+ 3.58	2.25	0.0	11	22	2	7	e.	John F. Park.
Farmerville.	Union.	177	19	37.4	- 9.5	78	3†	14	19†	36	6.83	+ 1.91	2.62	7.0	8	7	1	9	n.	W. P. Chandler.
Ferriday.	Concordia.	3	45.0	—	80	4	17	21†	35	4.10	+ 1.68	0.0	0	7	21	1	9	n.	R. Z. Slater.	
Franklin.	St. Mary.	10	17	49.8	- 3.8	83	4	25	30	41	6.63	+ 2.13	2.50	0.0	14	13	1	18	ne.	Miss Josephine M. Bonney
Grand Cane.	De Soto.	303	3	41.8	—	79	2	18	21	48	4.89	+ 1.20	2.20	0.2	5	11	4	16	w.	J. J. Paxton.
Grand Cotesu.	St. Landry.	93	17	48.7	- 5.1	81	4	23	30	37	6.28	+ 1.43	1.58	0.0	9	16	9	6	n.	St. Charles College.
Hammond.	Tangipahoa.	44	10	48.5	- 3.2	78	5	19	30	40	4.88	+ 0.29	1.56	0.0	6	17	7	7	nw.	C. C. Carr.
Houma.	Terrebonne.	17	—	—	—	—	—	—	—	—									J. M. Haggerty.	
Jennings.	Calcasieu.	30	11	47.4	- 4.6	80	4	26	21†	39	7.84	+ 2.75	2.52	0.0	8	10	15	6	n.	J. F. Buch.
Lafayette.	Calcasieu.	36	23	47.1	- 5.6	89	4	23	30	44	6.72	+ 2.30	1.87	0.0	7	12	7	12	n.	J. J. Davidson.
Lake Charles.	Cameron.	22	21	47.3	- 5.9	81	3	24	21†	39	6.39	+ 2.48	2.19	0.0	7	15	2	14	n.	A. O. Boudreax.
Lakeside.	Plaquemines.	6	19	48.4	- 5.8	80	1	26	30	40	6.68	+ 2.31	2.25	0.0	11	18	2	11	n.	L. J. Nunemacher.
Lawrence.	Bienville.	32	43.4	- 6.2	81a	3	14	21	48a	5.73	+ 0.79	2.56	T.	6	15	4	12	n.	H. C. Warmoth.	
Logansport.	De Soto.	192	4	—	—	—	—	—	—	7.26	+ 2.83	0.0	9	17	3	11	n.	Dr. E. A. Crawford.		
Melville.	St. Landry.	45	22	46.0	- 6.2	80	3†	22	30†	44	6.03	+ 1.23	2.08	0.0	8	13	5	13	n.	Mrs. Bettie M. Dennis.
Minden.	Webster.	194	21	38.8	- 8.3	73	3†	10	20†	46	7.93	+ 2.88	3.20	6.0	10	13	9	9	w.	Chas. B. McNeill.
Monroe.	Ouachita.	82	22	42.0	- 7.9	80	3†	19	21†	46	4.61	+ 0.13	1.60	0.5	8	15	6	10	se.	Miss Ethel Fort.
Morgan City.	St. Mary.	14	4	—	—	—	—	—	—	4.99	+ 2.43	0.0	—	18	5	5	5	n.	Eugene Stannard.	
Newellton.	Tensas.	2	43.2	—	78	4	18	30	38	4.10	+ 1.35	T.	6	16	9	6	n.	Virgil E. Kinsey.		
New Iberia.	Iberia.	15	19	49.8	- 5.0	78	4	25	30	31	5.93	+ 1.58	2.00	0.0	11	13	10	8	n.	John D. Fultz.
New Orleans (1).	Orleans.	15	35	50.4	- 4.0	77	1	26	30	32	7.40	+ 2.94	3.69	0.0	15	13	4	14	n.	Mrs. Jno. A. Gebert.
New Orleans (2).	do.	18	22	52.0	- 1.8	82	1†	26	30	38	8.48	+ 3.33	3.25	0.0	11	6	6	19	n.	U. S. Weather Bureau.
New Orleans (3).	do.	—	—	—	—	—	—	—	—	7.26	+ 2.54	0.0	—	15	—	—	—	—	Sewerage and Water Board, New Orleans Drainage Commission.	
New Orleans (4).	do.	—	—	—	—	—	—	—	—	7.97	+ 2.61	0.0	—	14	—	—	—	—	—	
New Orleans (5).	do.	—	—	—	—	—	—	—	—	7.24	+ 3.04	0.0	—	15	—	—	—	—	—	
New Orleans (6).	do.	—	—	—	—	—	—	—	—	7.25	+ 3.05	0.0	—	15	—	—	—	—	—	
New Orleans (7).	do.	—	—	—	—	—	—	—	—	7.26	+ 2.78	0.0	—	15	—	—	—	—	—	
New Orleans (8).	do.	—	—	—	—	—	—	—	—	6.67	+ 2.68	0.0	—	15	—	—	—	—	—	
Opelousas.	St. Landry.	83	18	46.6	- 4.5	84	4	22	30	41	7.77	+ 2.81	3.40	0.0	10	9	0	21	n.	Andrew Moreal.
Pearl River.	St. Tammany.	3	—	—	—	—	—	—	—	8.64	+ 0.81	1.90	0.0	6	17	6	8	e.	George F. Banks.	
Plain Dealing.	Bossier.	268	17	41.2	- 5.3	76	4	10	20	37	10.09	+ 4.68	2.57	3.0	11	13	6	12	ne.	Leon Sanders.
Rayne.	Acadia.	44	18	48.2	- 4.8	79	4	25	28†	35	7.05	+ 2.32	2.00	0.0	7	13	2	16	n.	A. P. McNeil.
Reserve.	St. John Baptist.	8	—	—	—	—	—	—	—	7.34	+ 2.60	—	—	10	6	15	10	—	Leon Godchaux Co.	
Robeline.	Natchitoches.	147	14	—	—	—	—	—	—	6.21	+ 0.11	3.10	0.0	10	14	7	10	ne.	Miss Ruby McCook.	
Ruston.	Lincoln.	312	13	43.2	- 4.8	80	4	16	20†	36	7.05	+ 2.23	2.00	0.0	7	17	4	10	n.	Charles V. Moore.
Schriever.	Terrebonne.	17	18	—	—	—	—	—	—	4.98	+ 0.81	1.90	0.0	6	17	6	8	e.	U. S. Weather Bureau.	
Shreveport.	Caddo.	249	37	42.2	- 6.7	76	4	20	20	30	6.38	+ 2.01	3.16	1.8	11	14	6	11	nw.	W. P. Denny.
Simmesport.	Avoyelles.	—	4	—	—	—	—	—	—	4.88	+ 2.01	1.78	0.0	9	8	4	19	n.	F. L. St. Martin.	
Southern Univ. Farm.	Jefferson.	14	—	—	—	—	—	—	—	6.21	+ 0.11	3.10	0.0	10	14	7	10	n.	L. P. Kilbourne.	
St. Francisville.	West Feliciana.	115	5	44.5	—	78a	4	22	30	42*	5.30	+ 2.01	1.73	0.0	5	20	7	4	n.	G. W. Richardson.
Sugartown.	Calcasieu.	17	48.4	- 3.3	78	1†	23	21	32	4.99	+ 0.57	2.30	0.0	6	6	6	19	6	...	G. P. Blair.
Tallulah.	Madison.	91	1	41.4	—	80	4	12	30	45	5.51	+ 2.27	T.	5	13	6	12	—	—	

* Precipitation included in that of the next measurement.

** Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.

† Also on other dates.

‡ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

§ Estimated by observer.

|| Precipitation for the 24 hours ending on the morning when it is measured.

** Precipitation is less than 0.01 inch rain or melted snow.

*, †, ‡, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2—*Daily precipitation for December, 1909. District No. 7, Lower Mississippi Valley.*

TABLE 2.—*Daily precipitation for December, 1909. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for December, 1909. District No. 7—Continued.*

Stations.	River basins.	Day of month.																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total		
Oklahoma—Cont'd.																																			
Meeker.	Canadian.																																		0.15
Muskogee.	Arkansas.	.91																																3.67	
Mutual.	Canadian.																																	0.30	
Neola.	Washita.																																	1.87	
Newkirk.	Arkansas.	.15																																0.55	
Norman.	Canadian.																																	0.48	
Okeene.	Cimarron.																																	0.32	
Oklahoma.	Canadian.	.01																																0.34	
Okmulgee.	do.	1.09																																1.34	
Pawhuska.	Arkansas.																																	1.25	
Perry.	do.	.04																																1.34	
Ravia.	Washita.																																	1.91	
Sac & Fox Agy.	Canadian.																																	0.52	
Shawnee|||.	do.																																	1.39	
Snyder.	Red.																																	0.10	
Stillwater|||.	Cimarron.	.76																																2.43	
Supply.	Canadian.																																	3.10	
Tulsa (1).	Arkansas.	1.48																																2.43	
Tulsa (2)|||.	do.	1.00																																3.10	
Vinita.	do.																																	0.34	
Wagoner.	do.																																	0.11	
Waukomis.	Cimarron.																																	2.29	
Weatherford|||.	Canadian.	.88																																0.66	
Webbers Falls.	Arkansas.	.05																																0.15	
Whiteagle.	do.																																	3.28	
Woodward.	Canadian.																																	0.98	
Kansas.	Meramec.	.40																																3.35	
Belle.	Black.	.40																																2.28	
Birchtree.	Mississippi.	.30																																2.04	
Cape Girardeau.	Caruthersville.	.12																																3.99	
Dean.	Neosho.	1.04																																3.98	
Doniphan.	Black.	.60																																4.07	
Farmington.	Mississippi.	.29																																2.19	
Gano.	Meramec.	.27																																2.58	
Goodland.	Black.	.27																																2.44	
Greenville.	Mississippi.	.62																																3.41	
Ironton|||.	do.	.40																																2.85	
Jackson.	do.	.26																																3.28	
Joplin.	Neosho.	.75																																2.60	
Koshkonong.	Black.	.55																																3.37	
Lamar.	Neosho.	.79																																2.70	
Marble Hill.	Mississippi.	.25																																3.75	
Mt. Vernon.	Neosho.	.08																																2.97	
Neosho.	do.	.68																																4.14	
Oakfield.	Meramec.	.18																																2.65	
Olden.	White.	.75																																3.75	
Sikeston.	Mississippi.	.30																																4.32	
Springfield.	White.	.31																																2.25	
Steelville.	Meramec.	.12																																1.44	
Willow Springs.	White.	.52																																1.98	
Kentucky.																																		4.35	
Blandville.	Mississippi.	.22																																4.09	
Lynnaville.	do.	.57	T.																															4.09	
Tennessee.																																		4.09	
Arlington|||.	Mississippi.	.18																																4.77	
Bolivar|||.	do.																																	5.39	
Brownsville|||.	do.	.19																																3.71	
Covington|||.	do.	.25																																3.45	
Dyersburg|||.	do.																																	4.87	
Jackson.	do.	.34	T.																														4.21		
Kenton.	do.	.23	.01																														5.73		
Memphis.	do.	.32																																4.22	
Milan|||.	do.	.73																																4.15	
Trenton.	do.	.15																																3.76	
Union City.	Arkansas.	.25																																3.76	
Alicia.	White.																																	3.10	
Amity.	Ouachita.	1.47																																3.18	
Arkadelphia (near).	do.	1.00																																7.89	
Arkansas City|||.	Mississippi.	1.30																																7.88	
Batesville (1).	White.																																	2.76	
Batesville (2)|||.	do.	.40																																2.18	
Bee Branch.	Arkansas.	.95	</td																																

TABLE 2.—*Daily precipitation for December, 1909. District No. 7—Continued.*

Stations.	River basins.	Day of month.																																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total		
Arkansas—Cont'd.																																			
Lake Farm.	Arkansas.																																		
Lewisville.	Red.	1.36			.97	38	.02				123.17	65								*	.64												9.35		
Little Rock.	Arkansas.	.39			.09	38				023.08	27	.04								.08	.05											T. 5.31			
Lutherville.	do.	1.50			.70		.10	.14		T. 1.20	.05	.10							.04												4.28				
McNeil.	Ouachita.																																		
Malvern|||.	Ouachita.	1.00				.97		.37				852.43	.27								.05	.23	T.										7.52		
Mammoth Spring.	White.																																		
Marked Tree|||.	St Francis.	.45																																	3.01
Mena.	Ouachita.	.94			.05	1.10		.10			T. 1.50	.06								.10												2.06			
Mosville.	White.	.90			T. 1.57		T.	T.			1.14	T.	T.							T.	.22	.08										T. 4.77			
Mount Nebo.	Arkansas.	1.20																																3.61	
Newport (1)|||.	White.																																	3.25	
Newport (2)|||.	do.	.50	.32																															4.69	
Osark.	Arkansas.	.43																																2.83	
Pine Bluff|||.	do.	.30	.10																															7.00	
Pocahontas.	White.	.50																																4.07	
Pond.	Arkansas.	1.17																																3.61	
Portland|||.	Ouachita.	.05	1.38																														5.88		
Prescott|||.	do.	1.10																																7.90	
Princeton.	do.																																		
Rogers.	Arkansas.																																	1.93	
Russellville|||.	do.	.07																																2.45	
Spierville.	Red.	1.20																																7.90	
Springbank|||.	Arkansas.	.49	.04																														6.24		
Stuttgart.	do.	.70																																7.50	
Texarkana|||.	Red.	1.43																																	
Warren|||.	Ouachita.	1.70																																7.36	
Wiggs.	Ouachita.	1.37																																T. 7.10	
Wynne|||.	St. Francis.	.04	.78																														5.30		
Mississippi.																																			
Anguilla.	Yazoo.	.72																																5.74	
Austin.	do.	.48	T.																															7.45	
Batesville|||.	do.	.26																																7.54	
Byhalia.	do.	.11																																6.33	
Canton.	Big Black.	.01	.01																														3.94		
Clarksdale.	Yazoo.	.38	T.																														4.88		
Coffeyville.	do.	.50	.40	.60																													5.01		
Corinth|||.	Mississippi.	.28																																7.77	
Crenshaw.	Yazoo.	.39	.01																																
Denmark.	do.	.15																																6.26	
Duck Hill.	do.	.48																																5.19	
Edwards.	Big Black.	.18	.05																														4.07		
Enid.	Yazoo.	.38	T.																															3.61	
Fayette.	Mississippi.	.26																																3.61	
Greenville.	Yazoo.	.86																																6.49	
Greenwood|||.	do.	.55																																6.18	
Grenada.	do.	1.03																																3.97	
Hernando|||.	do.	.45																																7.30	
Hickory Flat.	do.	.22	.10																														5.73		
Holly Springs|||.	do.	.15																																6.95	
Kosciusko|||.	Big Black.	.04																																3.61	
Lake Comorant.	Yazoo.	.64																																7.15	
Lula.	do.	.59																																8.20	
Malone.	do.	.20																																5.71	
Marks.	do.	.50																																8.27	
Natchez|||.	Mississippi.	.44																																5.10	
New Albany.	Yazoo.	.12	T.																															4.60	
Pontotoc.	do.																																	4.46	
Port Gibson|||.	Mississippi.	.27																																4.46	
Ripley.	Yazoo.	.38																																7.30	
Rosedale.	do.	.62																																7.47	
Senatobia.	do.	.25	T.																														4.39		
Shoocie.	do.	.22	.06																														7.25		
Suffolk.	Mississippi.	.50																																8.88	
Swan Lake|||.	Yazoo.	.60																																T. 4.89	
Tohola.	do.	.50	.65																														4.18		
University.	do.	.34	T.																														4.18		
Utica.	Mississippi.	.14																																3.71	
Vicksburg.	do.	.34	T.																															6.63	
Water Valley.	Yazoo.	.30																																	

TABLE 2.—*Daily precipitation for December, 1909. District No. 7—Continued.*

MONTHLY WEATHER REVIEW.

DECEMBER, 1909

TABLE 3.—*Maximum and minimum temperatures at selected stations, December, 1909.* District No. 7, Lower Mississippi Valley

Date.	Colorado.						New Mexico.						Texas.						Kansas.						Oklahoma.											
	Lamar.			Leadville.			Pueblo.			Albert.			Cimarron.			Amarillo.			Paris.			Dodge City.			Ellinwood.			Iola.			Liberal.			Wichita.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Mid.	Max.	Min.	Max.	Min.	Max.	Min.			
1..	48	33	30	11	47	27	45	23	49	12	44	26	66	46	44	28	51	32	57	41	46	33	50	40	59	40	54	46	59	40	54	46				
2..	44	30	32	20	42	26	53	25	51	22	50	31	63	41	42	32	46	33	47	36	41	27	48	38	60	37	53	36	68	37	53	36				
3..	48	24	23	7	32	13	50	33	48	28	49	28	71	41	37	20	44	29	56	39	29	18	49	28	73	45	68	43	83	45	68	43				
4..	24	10	8	-7	13	-8	35	18	31	12	28	11	77	49	20	1	30	11	38	19	37	-1	28	11	45	44	33	33	45	44	33	33				
5..	26	-4	21	-11	18	-11	37	4	21	-7	36	8	45	26	22	4	21	4	26	13	32	-12	26	11	39	20	37	20	37	17						
6..	21	9	14	-1	19	-3	38	23	37	12	40	9	42	30	26	2	24	4	26	13	34	9	26	8	43	25	34	22	22							
7..	16	3	12	2	21	-5	33	12	22	1	31	7	36	21	13	-4	13	-1	18	10	2	13	10	0	27	13	22	4	5	5						
8..	19	3	23	-1	27	0	39	16	40	9	23	17	28	21	9	2	13	-2	20	13	0	25	16	14	4	5	5									
9..	21	9	40	14	29	9	53	20	49	14	40	28	41	15	25	19	18	0	39	10	16	2	39	13	22	16	22									
10..	25	16	25	7	47	15	51	35	46	34	63	31	51	15	24	12	38	13	40	12	36	20	40	16	54	29	42	32								
11..	35	17	10	-2	36	22	41	24	37	16	42	25	49	36	23	9	28	10	40	21	30	14	26	15	45	33	34	28								
12..	35	10	30	-10	38	15	42	11	39	9	43	22	34	21	20	6	22	7	27	14	30	10	25	12	32	18	34	16								
13..	48	19	25	10	43	25	49	28	49	18	50	27	49	20	14	6	43	14	34	23	45	30	37	21	46	18	34	28								
14..	37	21	19	13	3	34	21	43	20	37	9	43	31	55	19	34	19	37	22	36	21	39	24	36	34	48	31	40	30							
15..	38	12	22	-7	44	14	39	9	30	-5	44	23	48	25	41	17	40	19	34	19	43	18	40	20	46	24	42	23								
16..	36	12	15	0	30	16	42	17	37	-7	46	35	55	25	41	17	41	27	45	19	41	33	43	21	45	26	23	16								
17..	30	10	10	-15	16	-5	31	14	23	3	30	12	44	26	17	2	35	10	19	9	35	11	21	10	31	30	26	12								
18..	20	2	5	-19	11	-16	17	4	12	-16	17	8	38	19	21	0	25	5	20	7	24	5	22	9	22	14	28	16								
19..	30	-1	18	15	25	-11	29	4	25	-7	24	3	41	19	27	1	29	6	31	9	34	2	33	14	28	16	30	12								
20..	27	3	12	-7	20	-3	30	7	14	-8	27	12	37	11	27	7	34	4	28	7	34	10	28	8	36	4	28	15								
21..	26	11	14	-13	21	-4	30	14	22	-6	29	14	45	11	24	12	30	11	32	12	33	14	29	15	41	14	36	12								
22..	25	9	21	-3	20	-6	34	1	28	-6	31	10	52	30	6	33	8	31	12	32	13	33	17	45	19	36	12	21								
23..	27	15	26	4	31	-3	43	18	36	-3	34	25	37	29	34	26	32	24	35	16	41	25	35	19	38	23	38	12								
24..	32	20	14	-7	32	-3	40	25	35	-5	38	28	41	31	32	19	34	24	34	24	35	25	34	24	45	31	34	32								
25..	35	5	35	-10	32	-1	45	16	36	-7	43	20	47	30	34	17	31	6	26	13	41	14	30	20	45	27	34	24								
26..	33	13	23	11	52	15	55	18	50	0	54	26	49	19	42	20	40	6	37	7	53	20	43	16	47	21	49	20								
27..	38	13	27	10	32	15	43	20	47	25	41	22	50	19	38	23	40	17	36	19	42	20	38	24	45	30	49	26								
28..	44	16	26	7	38	16	44	24	37	14	44	24	58	26	39	25	37	24	38	11	44	22	38	16	54	29	43	26								
29..	41	10	35	6	37	10	53	18	48	1	50	27	40	28	19	30	11	18	62	41	18	27	13	37	23	26	13	80								
30..	54	17	42	9	59	23	55	26	56	17	65	25	56	23	58	23	51	19	43	11	60	20	45	19	55	21	49	19								
31..	62	23	36	24	61	38	66	36	60	19	75	37	....	22	63	28	53	26	49	32	72	29	51	31	68	36	52	28							
Mns	33.7	12.4	22.1	0.4	32.3	8.2	42.1	18.7	37.2	6.8	41.6	20.3	48.1*	25.2	31.8	12.6	33.7	13.6	33.1	15.5	38.1	15.2	32.9	16.8	44.0	74.9	37.2	21.3								

Oklahoma.

Date.	End. §§		McAlister.		Mangum. §§		Mustogee.		Oklahoma.		Weatherford. §§		Woodward.		Caruthersville.		Ironton. §§		Lamar. §§		Olden.		Springfield.		Lynnaville, Ky.		Jackson, Tenn.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	49	49	61	43			60	43	54	41	58	33	50	30	55	42	52	35	61	46	56	41	59	47	60	45	66	41
2....	56	36	64	40			58	39	56	37	59	34	52	31	66	49	61	46	48	37	60	50	63	40	61	52	68	53
3....	58	35	66	44			69	48	67	38	55	39	46	36	76	38	61	33	68	36	65	38	64	40	57	42	70	37
4....	30	26	61	40			63	38	38	20	34	28	39	15	72	49	66	43	48	42	70	48	64	34	71	48	75	45
5....	32	15	40	21			38	21	32	17	35	17	32	12	64	39	53	50	28	18	65	25	34	16	66	33	73	49
6....	30	21	40	25			38	24	32	14	34	29	34	16	42	28	34	19	28	17	40	18	30	20	44	26	49	30
7....	19	5	37	14			35	9	19	6	25	8	20	6	40	28	26	20	24	3	33	18	25	4	43	29	46	31
8....	18	4	23	13			19	10	17	8	24	11	25	8	30	16	23	3	17	-3	19	4	11	1	30	14	32	21
9....	36	7	39	12			30	10	32	9	36	11	32	13	34	9	28	2	29	-3	26	2	20	0	25	8	33	14
10....	50	8	49	28			42	27	49	32	59	29	55	26	40	18	42	10	44	0	31	14	35	30	38	16	44	17
11....	37	25	51	34			44	32	34	19	40	21	40	22	46	26	39	25	34	28	38	29	38	23	43	32	47	39
12....	30	9	35	20			33	18	28	16	41	14	29	13	47	34	32	32	30	16	39	13	20	17	50	40	52	41
13....	30	15	43	24			38	26	38	17	44	17	43	9	36	26	30	25	34	18	23	34	24	41	28	44	29	
14....	39	19	47	35			40	31	39	29	42	20	42	26	50	26	39	23	33	35	36	23	34	23	47	27	56	27
15....	45	24	46	24			43	26	41	28	48	25	46	24	42	29	31	22	35	20	37	20	30	20	41	29	53	31
16....	51	27	60	29			57	27	53	30	56	24	52	27	51	21	49	16	47	22	47	23	46	23	41	20	48	21
17....	20	11	50	21			46	21	40	16	55	16	41	12	38	27	25	18	24	13	44	18	28	11	37	27	48	34
18....	25	10	24	15			32	17	21	15	31	13	26	8	30	18	23	9	21	7	34	11	19	8	29	15	38	18
19....	36	11	32	17			34	14	30	15	35	14	37	13	26	18	28	9	32	13	27	12	24	15	24	17	31	
20....	55	14	40	10			38	18	34	16	56	15	40	10	40	10	35	5	30	11	35	11	28	15	31	10	35	8
21....	35	14	41	15			40	16	38	21	41	16	38	19	45	16	33	13	34	11	38	13	32	12	36	12	43	10
22....	45	17	45	19			40	18	39	21	38	12	34	13	36	20	26	18	34	11	34	13	30	14	32	18	40	17
23....	36	18	40	25			37	23	36	29	35	31	35	23	38	17	34	8	34	12	33	10	30	16	33	13	39	17
24....	38	30	36	33			36	30	39	31	41	32	37	30	34	28	33	23	36	19	30	16	32	29	33	24	37	31
25....	49	19	45	23			39	26	40	25	46	26	43	23	36	25	26	23	28	20	33	23	28	14	35	27	39	31
26....	52	21	50	20			48	18	48	21	47	28	50	14	39	14	38	4	41	11	35	9	35	11	30	15	38	19
27....	46	26	46	28			43	26	43	25	48	26	45	20	40	26	30	19	35	13	32	23	32	20	33	23	42	25
28....	48	25	55	29			50	25	47	28	53	35	48	29	48	20	33	16	34	21	39	20	36	12	41	21	49	20
29....	38	16	44	17			36	14	32	17	39	18	40	17	34	10	17	0	19	5	28	5	35	3	33	6	46	14
30....	50	17	52	13			49	17	49	23	50	23	62	21	36	9	33	1	41	5	38	5	43	9	29	4	36	10
31....	58	20	60	41			62	34	60	35	60	32	71	24	49	26	58	19	55	29	29	56	38	46	25	47	27	
Mns	40.0	19.2	45.8	25.2			43.1	24.1	39.5	22.5	44.0	22.5	41.7	19.2	43.8	24.5	36.6	19.0	35.7	16.4	39.5	19.8	34.5	18.5	40.6	24.2	46.9	26.6

TABLE 3.—Maximum and minimum temperatures at selected stations, December, 1909. District No. 7—Continued.

Date.	Tennessee.				Arkansas.																Mississippi.																											
	Memphis.		Union City.		Bentonville.				Corning.				Dardanelle.				Eldorado.				Fort Smith.				Little Rock.				Pine Bluff.				Texarkana.				Wynne.				Clarkdale.				Corinth.		Greenville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.										
1...	58	51	64	44	61	45	54	39	65	40	72	46	63	49	66	51	72	50	65	49	59	48	62	44	68	47														
2...	62	52	61	54	52	40	65	51	67	44	65	42	53	45	68	48	70	43	60	44	60	53	.....	.....	.....	.....	.....	.....	.....	66	48	69	54								
3...	68	49	62	42	65	38	68	38	65	38	75	40	68	44	70	43	74	38	68	44	63	53	.....	.....	.....	.....	.....	.....	.....	68	38	75	39								
4...	74	56	73	48	69	32	77	50	75	38	77	42	72	37	75	57	77	50	76	49	75	38	.....	.....	.....	.....	.....	.....	.....	73	40	80	41								
5...	62	35	64	41	32	18	72	36	43	28	51	40	39	25	67	25	50	44	45	32	48	47	.....	.....	.....	.....	.....	.....	.....	60	49	58	53								
6...	47	32	44	27	33	18	40	25	43	25	42	32	35	28	40	29	46	29	42	32	45	28	.....	.....	.....	.....	.....	.....	.....	50	32	43	35								
7...	37	26	43	29	26	7	37	26	32	30	45	35	35	35	36	37	24	45	33	39	34	28	28	36	32	47	36														
8...	26	21	30	15	17	4	29	14	30	20	37	27	24	15	27	20	32	23	32	28	24	17	.....	.....	.....	.....	.....	.....	.....	34	24	36	28								
9...	30	16	30	11	27	4	31	11	35	17	42	19	30	13	33	16	38	16	40	20	28	13	.....	.....	.....	.....	.....	.....	.....	32	15	39	20								
10...	48	25	40	18	46	21	36	19	38	16	55	20	37	26	41	24	42	20	57	21	48	16	.....	.....	.....	.....	.....	.....	.....	49	16	53	21								
11...	48	43	44	36	46	24	43	35	42	29	57	30	45	31	51	40	45	34	61	35	51	26	.....	.....	.....	.....	.....	.....	.....	51	21	56	27								
12...	49	29	49	36	27	19	44	33	38	29	36	35	33	23	41	30	37	34	32	28	37	26	.....	.....	.....	.....	.....	.....	.....	54	44	46	46								
13...	32	27	41	29	35	24	34	27	39	29	46	26	40	27	38	26	40	25	46	24	37	27	.....	.....	.....	.....	.....	.....	.....	32	30	44	30								
14...	52	32	47	29	37	24	46	29	41	26	58	26	44	28	52	33	62	26	56	26	52	28	.....	.....	.....	.....	.....	.....	.....	57	28	62	29								
15...	37	28	42	30	34	21	39	27	41	27	46	28	41	25	40	28	50	28	47	29	39	24	.....	.....	.....	.....	.....	.....	.....	42	29	50	31								
16...	48	29	46	24	49	25	50	23	42	24	56	24	54	25	54	28	62	23	54	28	51	25	.....	.....	.....	.....	.....	.....	.....	46	23	54	25								
17...	42	30	41	28	33	15	35	26	42	26	51	26	41	23	45	28	45	35	51	29	41	23	.....	.....	.....	.....	.....	.....	.....	45	23	51	29								
18...	30	19	30	18	23	12	29	17	30	15	25	24	26	26	17	28	19	25	29	25	22	22	.....	.....	.....	.....	.....	.....	.....	22	21	28	26								
19...	23	19	25	18	30	15	25	18	30	11	26	20	31	19	26	19	25	18	27	21	21	17	.....	.....	.....	.....	.....	.....	.....	23	17	25	21								
20...	33	17	35	12	35	14	30	13	36	11	37	11	39	13	37	17	44	10	35	13	35	4	.....	.....	.....	.....	.....	.....	.....	33	14	37	19								
Mns	43.0	29.4	42.5	26.3	38.3	20.4	42.6	25.3	43.2	24.4	49.3	27.4	42.5	25.6	45.3	28.9	49.2	27.7	48.0	28.8	42.3	25.1	.....	.....	.....	.....	.....	.....	.....	43.9a	25.4	49.2	29.2								

Date.	Mississippi.								Louisiana.																New Orleans.								Shreveport.									
	Kosciusko.				Natchez.				Vicksburg.				Alexandria.				Baton Rouge.				Covington.				Lafayette.				Lake Charles.				Monroe.				Robeline.				Schriever.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1...	63	45	72	49	67	56	77	41	74	61	75	40	70	48	80	50	77	42	77	59	.....	.....	.....	.....	.....	.....	.....	69	54	.....	.....	.....	.....	.....	69	54
2...	69	52	71	58	64	52	69	51	76	60	70	59	71	55	76	50	68	49	74	58	.....	.....	.....	.....	.....	.....	.....	65	46	.....	.....	.....	.....	.....	65	46
3...	72	38	79	46	74	49	80	43	77	49	76	39	73	42	81	45	80	41	76	54	.....	.....	.....	.....	.....	.....	.....	74	47	.....	.....	.....	.....	.....	74	47
4...	75	38	80	48	78	54	80	42	79	58	79	40	88	45	79	45	80	41	76	57	.....	.....	.....	.....	.....	.....	.....	76	59	.....	.....	.....	.....	.....	76	59
5...	63	43	62	55	67	43	60	48	65	63	69	62	67	43	67	45	62	46	71	59	.....	.....	.....	.....	.....	.....	.....	59	55	.....	.....	.....	.....	.....	59	55
6...	58	37	65	44	58	41	56	42	67	54	69	51	71	71	60	66	45	52	36	71	55	43	36	43	36					
7...	41	38	50	43	46	34	50	41	57	45	58	48	54	45	54	43	59	40	54	38	70	44	43	35	43	35				
8...	40	29	44	33	43	29	42	33	43	36	48	32	44	32	44	32	53	34	51	31	47	37	41	29	41	29				
9...	39	20	46	25	43	24	49	25	50	30	53	30	52	28	56	27	48	23	49	36	43	36	43	24	43	24				
10...	53	20	65	25	59	29	62	32	53	32	52	30	59	35	65	46	57	40	55	34	62	45	56	30	56	30				
11...	57	25	72	34	67	52	73	31	60	58	66	32	71	40	70	34	74	29	66	60	60	41	65	41	65	41				
12...	53	46	51	51	58																																					